## Swan View Coalition

Nature and Human Nature on the Same Path



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November 16, 2010

Mike O'Herron Montana DNRC 2705 Spurgin Road Missoula, MT 59804

Re: Comments on Final EIS/HCP sent as PDF by email to <a href="mailto:dnrchcp@mt.gov">dnrchcp@mt.gov</a>

Dear Mr. O'Herron and Folks at DNRC;

Please accept this letter/PDF as our comments on the Final EIS/HCP. We also incorporate by reference the comment letters of Friends of the Wild Swan, Defenders of Wildlife, Natural Resources Defense Council, and Montana Environmental Information Center in this matter.

We are wholly disappointed in the FEIS/HCP and find it does not provide an adequate basis for securing an Incidental Take Permit from Fish and Wildlife Service. We repeat the concerns expressed in our October 6, 2009 letter on the DEIS because they have not been responded to with substantive changes in the FEIS.

There still exists no true Conservation Alternative in the FEIS and we again ask that one be developed and completely assessed. Alternative 3 does not cut the mustard because it, among other things, builds some 1, 322 miles of new road, an average of some 26 miles of new road each year (FEIS at 4-19).

Indeed, while identifying Alternative 3 as the "environmentally preferred alternative," the Environmental Protection Agency in its 10/5/10 comments on the FEIS finds it and the HCP still fail to comply with INFISH standards, fail to comply with road density limits necessary to conserve bull trout, and fail to adopt a shorter and more reasonable term for the Incidental Take Permit. In short, DNRC has yet to develop and select an adequate alternative, which it must do.

We will here discuss in greater detail the issue of roads in grizzly bear habitat and the HCP's faulty reliance on the Swan Valley Grizzly Bear Conservation Agreement. To begin with, there exists a disturbing reference in the HCP suggesting that grizzly bears successfully tolerate high road densities in the Swan Valley:

Additionally, a radio-collared survey of 10 grizzly bears (six male and four female) in the Swan Valley from 2001 to 2005 demonstrated broad use of the valley and tolerance of high road densities (Hicks et al.2010).

(HCP at 2-10; citing Hicks, L., R. Steiner, A. Vandehey, C. Servheen, J. Ingebretson, R. Baty, and R. Mace. 2010. The Swan Valley Grizzly Bear Conservation Agreement: a case history of collaborative landscape management. Plenary presentation at the Montana Chapter Wildlife Society meeting. February 24, 2010. Helena, Montana).

None of the above referenced authors could or would provide a copy of the presentation when we requested it. We've included three documents with this letter PDF, demonstrating bears in the Swan Valley do not successfully tolerate high road densities and other human developments in the Swan Valley. We've attached to this same email the file "Swan Valley Grizzly Bear Research and Monitoring" (likely the same research effort the HCP references as Hicks et al. 2010) and included in this PDF: 1) a 12/24/07 Missoulian news article regarding this research and 2) the page 112 errata sheet to Mace and Waller's 1997 South Fork Grizzly Bear Study Final Report.

The "Swan Valley Grizzly Bear Research and Monitoring" finds that, of the 24 marked bears using the Swan Valley, 42% of them have already died, along with 3 unmarked grizzly bears (page 38). The monitoring also shows grizzly bear survival was best in areas with low road densities and adequate hiding cover; meaning areas not chock full of roads, clearcuts, overly-thinned forests, and other human developments (page 36). Though it goes without saying, Fish and Wildlife Service indeed calls this level of mortality "unsustainable" (see the included December 24, 2007 Missoulian news article). In other words, bears that exhibit "tolerance" for roads in the Swan Valley are paying the price through unsustainable mortality.

Moreover, if the Swan Valley Grizzly Bear Conservation Agreement were an adequate management mechanism, then the Conservation Area would not be experiencing unsustainable mortality rates. Nor, perhaps, would the Swan Range grizzly bear population be decreasing at a rate of over 2% per year, a rate that would halve the population in 30 years according to the South Fork Grizzly Bear Study Final Report (see the included page 112 errata sheet to Mace and Waller). DNRC has provided no support for the notion that grizzly bears can sustain bleeding off from the Swan Range only to meet with unacceptable and unsustainable mortality risks in the Swan Valley and elsewhere.

It is clear the Swan Valley Grizzly Bear Conservation Agreement does not provide adequate grizzly bear security in order for bears to not come into conflict with humans and human developments in the Swan Valley. Indeed, the "Swan Valley Grizzly Bear Research and Monitoring" shows bears sampled in "an area with high total road density, intensive timber management" and hundreds of small private landowners and residences (page 20) are dying at unsustainable rates on the order of 42% (page 38).

You must revisit the findings of the South Fork Grizzly Bear Study, which concluded the Swan Mountain study area population is likely declining at over 2% per year - especially as it relates to the Swan Valley area likely serving as a related population sink. You must also revisit the Swan Valley Grizzly Bear Conservation Agreement and implement road and motorized route density limits/standards more restrictive and on the order of Flathead Forest Plan Amendment 19 standards applied to Forest Service lands where they constitute greater than 75% of the grizzly bear subunit. This to help remedy the lack of security and unacceptable levels of mortality in the Swan Valley.

Thank you for this opportunity to comment.

Sincerely,

Keth

Keith J. Hammer Chair

Enclosures:

12/24/07 Missoulian news article by John Cramer, "Study Sheds Light on Grizzlies"

Page 112 errata sheet to Mace and Waller's 1997 "South Fork Grizzly Bear Study Final Report"

By separate email attachment:

"Swan Valley Grizzly Bear Research and Monitoring"

Date: Sun, 27 Jan 2008 11:36:07 -0700
To: "hammer, keith" <keith@swanview.org>
From: Keith Hammer <keith@swanview.org>

Subject: Swan Griz mortality

## Study sheds light on grizzlies

By JOHN CRAMER of the Missoulian December 24, 2007

It's not the bruin superhighway, but the Swan Valley's grizzly bears often use four corridors to travel back and forth between the surrounding Swan and Mission mountains, an ongoing study shows.

Twelve of the valley's estimated 30 bears were tracked over the past five years, providing a glimpse into how they live and die in the Swan.

A collaboration between federal and state agencies and Plum Creek Timber Co., the study has been limited by a lack of funding, but the bears' high death rate has already prompted a number of management changes.

Among them are a \$10,000 reward for turning in grizzly poachers, more bear-awareness public education efforts and a decision by Plum Creek to only sell its lands in grizzly linkage zones to buyers who won't develop them.

Chris Servheen, grizzly bear recovery coordinator for the U.S. Fish and Wildlife Service, said the bears' 33 percent mortality rate in the Swan was unsustainable and directly linked to humans' presence in habitat where the grizzly was once king of the forest.

The causes of death couldn't be determined, but poaching, poison, traffic injuries and other human causes were suspected.

"It's the road to ruin unless we can find a way for these bears and people to live together," Servheen said.

The Swan Valley is a perfect natural laboratory to monitor the effectiveness of bear-awareness efforts because of its combination of good habitat and busy roads, intensive logging, and growing residential and commercial development.

The study highlights the need to preserve areas where grizzlies can safely travel between valleys and mountain forests and to find new ways for people and bears to live together, Servheen said.

The findings highlight grizzlies' vulnerability and the need for more funding to better understand the endangered species as it continues to repopulate its old habitat across the northern Rockies.

"We need to preserve these safe passageways," said Henning Stabins, a wildlife biologist for Plum Creek, which owns more than one million acres in western Montana. "We want a healthy grizzly bear population like everyone else" so it can be removed from the endangered species list.

The Swan Valley study, which started in 2000, is part of the Swan Valley grizzly bear conservation agreement signed by major landowners and government agencies in 1995.

The study had no dedicated funding or personnel, but was carried out by researchers who tackled the work as part of their regular job duties.

Using global positioning system collars, researchers followed 12 grizzlies that live in the checkerboard of public and private land in the Swan Valley. The valley's population of about 600 residents is expected to grow as timberland gives way to residential development.

The study followed the bears for months at a time, tracking their movements hourly inside and outside the valley during the spring, summer and fall.

The bears crossed the valley most often in four areas that had fewer roads, fewer homes and businesses, and more forest cover for hiding.

Researchers were surprised to learn some bears spent most of their time in the valley bottom rather than moving to higher elevations,

while other bears covered unexpectedly large territories of hundreds of miles before returning to the Swan.

"That was completely astounding," Servheen said.

The bears were most active at night. Some male grizzlies changed their territories from year to year, while one female bear lived very close to homes, businesses, roads and hiking trails and never encountered people.

Some bears never left the valley. Others never crossed Highway 83, the main road through the valley, while others crossed repeatedly.

As a result of the grizzly conservation agreement and monitoring study, Plum Creek and the Forest Service have agreed to help protect the bear's habitat by building fewer roads, banning motorized recreation on their existing roads and protecting more streamside areas.

Plum Creek, the largest private landowner in the United States, and the Forest Service also are cutting less timber, and only in areas and at times when it will not affect bears.

Plum Creek, which is selling much of its property in western Montana for residential development, has agreed to sell its lands in the grizzly corridors only to the Forest Service or to private buyers who adopt conservation agreements that prohibit development.

The company also agreed to sell its land between the bear linkage zones only to private developers who sign deed restrictions that prohibit fruit trees, outdoor barbecue pits, gardens without electric fences and other food sources that attract grizzlies.

The agreement's partners also state that its employees and contractors won't carry firearms in grizzly territory. Studies show bear spray is more effective than bullets in deterring a charging grizzly.

The study includes FWS, the Montana Department of Natural Resources and Conservation, the U.S. Forest Service, the Montana Department of Fish, Wildlife and Parks and Plum Creek.

The agreement coordinates activities among landowners and requires special management practices for logging and other forest uses.

The goal was to maintain grizzlies' ability to travel safely between the Bob Marshall and Mission wilderness areas, and to come up with a conservation plan that helped landowners to continue to live and work their lands.

The project's partners agreed to further bear-awareness efforts, such as containing fruit trees, birdseed, pet food and other food that attracts bears, and to try to better understand the grizzlies' movements and causes of death.

The conservation area covers 369,000 acres, or 6 percent of the Northern Continental Divide Ecosystem, which is one of several grizzly recovery zones in the Lower 48 states.

In the Swan Valley, Plum Creek recently put 7,200 acres into a conservation agreement with state and federal agencies, while agreeing to sell another 1,700 acres to the state.

Stabins said the company tries to balance its business goals with the need to protect imperiled species. "There are trade-offs, but environmental stewardship makes good business sense," he said.

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## ERRATA, PAGE 112, MACE AND WALLER

An error in calculating the reproductive rate for 6 female grizzly bears was discovered upon publication of this manuscript. The actual reproductive rate for female cubs was 0.261 not 0.389. This change in reproductive rate surved to change the mean estimate of lambda from 1.009 down to 0.977. The correct text and table for the section "vital rates and population trend" should read as follows:

Our estimated finite rate of increase ( $\lambda$ ) was 0.977 (95% CI = 0.875 - 1.046) given the fixed and estimated demographic variables (Table 6). The uncertainty in  $\lambda$ , as indicated by the proportion of the variance explained, was primarily due to variation in subadult female survival (56.07%) followed by adult female survival (37.25%). Cub and yearling survival explained a small proportion of the variance (Table 6).

The probability that the population was declining was 69%, stable to increasing 31%, and increasing 27%. The annual exponential rate of increase (r) was -0.02 (-0.13 - 0.045), indicating it would take  $\approx 30$  years to observe a population halving, given long-term stability of vital rates.

Table 6. Estimated annual survival rates by class, reproductive rate, and population trend of grizzly bears in the Swan Mountains, Montana. 1987-1996.

Parameter	Survival and Rate of Change Estimates					
	Sample size	Estimate*	Lower 95 % CI	Upper 95% CI	SE of	Variance proportion (%)
Adult female survival (S.)	16/56°	0.899	0.785	0.966	0.046	37.25
Subadult female survival (\$,)	15/21°	0.825	0.629	0.962	0.089	56.07
Yearling survival (S,)	25/30*	0.906	0.906	1.000	0.049	1.53
Cub survival (S.)	28	0.785	0.643	0.928	0.076	2,87
Age first parturition (a)	fixed	6.0				2.07
Reproductive rate (m) 6	6	0.261	0.214	0.316	0.026	2,88
Maximum age (w)	fixed	25.0			V.020	4,90
Lembda (\(\lambda\)	5000	0.977	0.875	1.046	0.043	

<sup>\*</sup>Survival rate estimates may differ from those in Table 4 as described in Methods,

"Number bears/bear-years.

Fax Transmittal Memo	# of Pages /
To: frith Hammer	From: H. Nighan
Co.:	Co.:
Dept.:	Phone #

<sup>\*</sup>The proportion of variance in lambda explained by each parameter.

Reproductive rate is for female cubs only. Assumed sex ratio at birth of 50:50.